What is claimed is

1. An improved composition for Nitrate removal and for the treatment of waste water streams, without pH adjustment comprising: (1) a clay absorbent or absorbent-adsorbent product or organic modified clay, (2) a highly insoluble crosslinked carbohydrate polymer with branched-chain structure and having present sulfide or disulfide group, or sulfonated or sulfate group, or crosslinked starch xanthate, or starch xanthate-xanthide, or regenerated cellulose(Ground viscose), or 1,3,5-Triazine trithione trisodium salt, and (3) a material selected from the group consisting of activated carbon, anthracite or lignin, and with the proviso that at least two of the three products are present and said product is in solid form or granule or pellets.

2. A product according to claim 1 wherein the clay is selected from the group consisting of: silica Vulco hectorite clays, sodium bentonite clays, calcium bentonite, fuller's earth clays, aluminum siliceous clays and combinations thereof, or an organic modified of sodium bentonite or calcium bentonite or mixture of these, or siliceous volclay, or attapulgite clay, a hydrous silicate of aluminum generated from sodium bentonite or calcium bentonite, cross-linked montmorillonite molecular sieves, porous silicate glass, kaolin surface modified by polycyclopentadiene, tricalcium aluminate, calcium silicate hydrate (comprising by formula $Ca_6Si_6O_{17}(OH)_2$) with bulk density of 85–139 g/liter, silica xerogels, high-porosity silica xerogels, crystalline metal-organic microporous materials surface, or surface altered zeolites, or clinoptilolite, zeolite Analcime and, Analcite comprising the formula $Na_2O.Al_2O_3.4SiO_2.2H_2O$).

3. The composition according to claim 1 wherein the insoluble highly crosslinked carbohydrate polymer is selected from the group consisting of: 25% amylose and 75% amilopectin having a branched- chain structure and having present sulfide or disulfide group, or sulfonated or sulfate groups, or crosslinked starch xanthate, or starch xanthate-xanthide mixture crosslinked by 2-chloro-N,N-diethylacetamide or epichlorohydrin, sodium trimetaphosphate, phosphorous oxycloride, formaldehyde, glyoxal, acrolein, and N-methylol urea, a crosslinked starch xanthate having sulfide or disulfide group present, or starch xanthate- xanthide mixed composition or blend, dithiocarbonic acid or xanthate, or 3-mercaptopropyltrimethoxysilne or 3-mercaptopropylmethyldimethoxy-silane, or 1,3,5-Triazine-2,4,6-(1H,3H,5H)-trithione, trisodium salt,or regenerated cellulose(Ground Viscose) modified NaOH-Diethylaminoethyl chloride hydrochloride) crosslinked with EPI(epichlorohydrin) and exchange capacity of 0.65-0.95 milliequivalents per gram, and/or Activated Carbon, or anthracite, or lignin.

4. A composition according to claim 2 wherein said organic modified clay is selected from the group consisting of Hectorite, or Bentonite, or Hectorite-Bentonite clay, or high swelling sodium bentonite Vulco clay, or mixtures, modified with methyl-dihydrogenated tallow-amine or dimethyl dihydrogenated tallow amine, M2HT or 2MHT,having quaternary ammonium motie chlorine or dichloride, or methyl sulfate or ethyl sulfate, or clay modified by quaternary ammonium compound comprising by formula of [$N(+)R_{1,2,3,4}$] (Cl^-)], or protonized by organic acid, and most preferable been a clay modified with dihydrogenated-tallowamine, (2HT), quaternized or protonized, or by quaternary ammonium salts consisting of dimethyl-dihydrogenatedtallow ammonium chloride, DMHT, methyl-dihydrogenated-tallowamine, or M2HT,

dihydrogenatedtallowamine 2HT,or dimethyl-dihydrogenatedoctadecylbenzylammonium chloride or DMHT-B, methyl or dimethyl chloride or sulfate of high alkyl amine(C_{12}-C_{24} motie),alkylaryl moiety quaternary ammonium ion, alkylated diazobicyclo ions(1,4-diazobicyco[2,2,2.]octane, alkyl diammonium cations comprise decyltrimethyldiammonium(DTMA).

5. A composition according to claim 2 wherein said organic clay comprise the use high swelling sodium bentonite, or calcium bentonite, modified by hydrophobic alkylamines comprising by stearyl amine, or primary hydrogenated tallow amine, or di-hydrogenated tallow amine, or N-alkyl(tallow)-1,3-propane diamine, or mixture of these, and protonized by mono organic acid, or diacid, or mixture of these, and preferable C_4-C_{18} acid , hydroxy acids composition(s), and most preferable consist on glacial acetic acid, hydroxy glycolic acid, or di-glycolic acid, or mixture of these.

6. The composition according to claim 2 wherein said earth adsorbent additives are selected from the group consisting of aluminum silicates, calcium aluminum silicates, magnesium silicates, calcium silicates, calcium magnesium silicates, and combinations thereof, and most useful group comprising from siliceous volclay, or attapulgite clay, a hydrous silicate of aluminum generated from sodium bentonite or calcium bentonite, cross-linked montmorillonite molecular sieves, porous silicate glass, kaolin surface modified by polycyclopentadiene, tricalcium aluminate, calcium silicate hydrate (comprising by formula $Ca_6Si_6O_{17}(OH)_2$) with particle size with bulk density of 85 – 139 g/liter, silica xerogels, high-porosity silica xerogels, crystalline metal-organic microporous materials surface, or surface altered zeolites, or clinoptilolite, zeolite

Analcime (Analcite comprising by formula $Na_2O.Al_2O_3.4SiO_2.2H_2O$).

7. The composition of claim 4 wherein said organic modified clays are further mixed with a cellulose selected from the group comprising modified cellulose fibers, hydrophobic brown cellulose, natural cellulose fiber, kenaf fiber or kenaf cellulose, or high crosslinked starch xanthate, adipoguanamine, or adipoguanamine silicone surface modified cellulose or kenaf, polymethylene urea, or polymethylene urea silicone surface modified cellulose or kenaf, calcium sulfate hemihydrate and combinations thereof.

8. The composition according to claim 7 wherein said modified cellulose fiber Comprises cellulose (38%), lignin (18%), pectin (33%) and protein substances (11%), or kenaf cellulose

9. The composition according to claim 1 comprising: from 0 to to 70 parts, high swelling sodium bentonite; from 10 to 70 parts, calcium bentonite; from 0 to 70 parts, zeolite from 20 to 0 parts, insoluble carbohydrate polymer as high crosslinked yellow starch xanthate(PR-XIS 100) from 0.5 to 70 parts, insoluble carbohydrate polymer crosslinked starch xanthate alloy with sulfamic acid, or 1,3,5 triazine-trithione salt (PR-XIS 200) from 70 to 0.1 parts, and providing that atleast two of the components are positive.

10. A composition according to claim 7 which is compatible with a polyelectrolyte flocculant selected from the group comprising cationic ployelectrolytes, anionic polyelectrolyte, nonionic ployelectrolytes, and combinations thereof, and the

most preferable is an anionic polyelectrolyte.

11. A composition according to claim 9 which further comprises mixing such composition with compound selected from the group comprising activated carbon, charcoal, lignin and combinations thereof.

12. A composition according to claim 4 wherein said organic modified clay comprises one or more clays reacted with one or more amines selected from the group comprising protonized primary (C_{12}-C_{22}) alkyl amines, protonized secondary (C_{14}-C_{28}) alkyl amines, protonized secondary (C_{14}-C_{28}) alkyl diamine, protonized tertiary (C_8-C_{30}) alkyl amine, and quaternary ammonium compounds having at least one moiety selected from the group comprising chlorine, COO-, (OH) CH (CHO) COO-, -SO_4, -SO_3, -CH (OH) COOY, CH_3COO-, hydroxyalkyl (OH) COO-, and -NCH(OH)(CHO), Cl^-, Br^-, and mixture of these.

13. A composition according to claim 4 wherein said amine is selected from the group consisting of: methyl dihydrogenated tallow ammonium chloride, dimethyl dihydrogenated tallow ammonium chloride, dimethyl dihydrogenated dicoco ammonium chloride, dimethyl (C_{12}-C_{17}) alkyl ammonium chlorides, N, N, N, N, N-pentamethyl-N-Tallowalkyl-trimethylene-dichlorides, benzyl ammoniumorgano clays, N-Alkyl-1, 3-propane fatty diamine, ether diamine, (C_8-C_{23}) tertiary amines, dihydrogenated tallow amine and combinations thereof.